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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/608,310

06/27/2003

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3551P052

8936

8791 7590 10/15/2007  
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EXAMINER

PHAN, TRI H

ART UNIT

PAPER NUMBER

2616

MAIL DATE

DELIVERY MODE

10/15/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/608,310

Applicant(s)

KUMAR ET AL.

Examiner

Tri H. Phan

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12-27 and 29-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-10, 12-27 and 29-33 is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Amendment/Arguments*

1. This Office Action is in response to the Response/Amendment filed on July 16<sup>th</sup>, 2007. Claims 11 and 28 are now canceled. Claims 1-10, 12-27 and 29-33 are now pending in the application.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-6 are rejected under 35 U.S.C. 102(e) as being anticipated by **Strasser et al.** (U.S.2003/0185238; hereinafter refer as '**Strasser**').

- In regard to claim 1, **Strasser** discloses a *method, which comprise*  
*time-stamping only a lead packet* ('PCR'; for example see page 2, para [0018]; wherein the PCR value is provided every 100ms for synchronizing with the system time clock 'STC' to provide 'reference clock value or representation current timestamp', e.g. "*time-stamping only a*

Art Unit: 2616

*lead packet*”, which uses to compare with the time-stamped SPTP when playing back as disclosed in page 4, paras [0037-0039]) *in each of a plurality of chunks; each of the plurality of chunks comprising the lead packet and a plurality of packets* (‘single program transport stream SPTS’; for example see page 2, paras [0017-0018]; wherein each SPTS, e.g. “*chunks*”, comprises PCR, e.g. “*lead packet*”, and a plurality of packets for video and audio channels);

*storing the time-stamped chunks on a storage medium* (‘current timestamp register 550’, ‘stored timestamp register 510’ in fig. 5; for example see page 4, paras [0037-0039]);

*reading back at playback time the stored chunks with their timestamps from the storage medium* (for example see page 4, paras [0037-0039]); *and*

*reconstructing a partial transport stream using the chunks and their timestamps read back* (‘reconstructed SPTS 325’ in fig. 3; for example see page 2, para [0016]; page 3, paras [0027-0029]), *wherein the chunks are arranged in the partial transport stream in response to their timestamps* (for example see fig. 2; page 2, para [0020], lines 3-7; fig. 4, page 4, para [0036]).

- Regarding claim 2, **Strasser** further discloses method of

*receiving a full transport stream* (‘multiple program transport stream SPTS 105’ in fig. 1); *and*

*filtering the full transport stream to generate the subset of time-stamped packets* (‘single program transport stream 115’ in fig. 1; for example see page 2, para [0019]).

- In regard to claim 3, **Strasser** further discloses, *wherein the storage medium is an external memory* ('storage 160' in fig. 1; 'storage 310' in fig. 3; 'timestamp register 550' in fig. 5).

- Regarding claims 5-6, **Strasser** further discloses, *wherein time-stamping includes recording a value of a counter for the lead packet* ('reference clock value'; for example see page 1, para [0003]; page 4, para [0039]; wherein the PCR are provided for creating the reference clock value for STC to maintain synchronization) and *wherein the counter is a system time clock counter* ('STC 120' in fig. 1; for example see page 1, para [0003]).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Strasser et al.** (U.S.2003/0185238) in view of **Demas et al.** (U.S.2003/0165196; hereinafter refer as '**Demas**').

- In regard to claim 4, **Strasser** discloses all the subject matter of the claimed invention as discussed in part 3 above of this office action, including the use of memory storage 160 in fig. 1 or memory storage 310 in fig. 3 for storing SPTPs and related timestamps as disclosed page 3,

Art Unit: 2616

para [0022], [0029], or 'timestamp register 550' in fig. 5, e.g. "*external memory*"; but fails to explicitly disclose, wherein the external memory comprises a '*double data rate memory DDR*'.

However, such implementation is known in the art.

For example, **Demas** discloses the method and system for managing time-based for MPEG decoding in personal video recorder system (for example see Abstract, fig. 1); which use DDR-SDRAM, e.g. "*double data rate memory 'DDR'*", as storage unit for storing records (for example see pages 3-4; para [0033]).

Thus it would have been obvious to the person of ordinary skill in the art at the time of the invention was made to implement the use of DDR memory as storage as taught by **Demas** in the **Strasser**'s storage, with the motivation being to quickly locate particular picture frames during playback and recording in timing issue as disclosed in **Demas**: page 1, para [0004].

### ***Response to Amendment/Arguments***

6. Applicant's arguments filed on July 16<sup>th</sup>, 2007, with respect to claims 1-6, have been fully considered but they are not persuasive.

In the REMARKS, page 10, with respect to claim 1, Applicant argues that **Strasser** fails to disclose the method "*timestamping only a lead packet in each chunk*", because the timestamps in Strasser are generated for each individual transport packet related to a single program (Strasser, paragraph [0022]). Examiner respectfully disagrees. **Strasser** disclose, wherein the system time clock 'STC' synchronizes with the program clock reference 'PCR' or "*lead packet*" to provide the reference clock value or representation current timestamp, e.g. "*timestamping only a lead packet in each chunk*", which uses to compare with the time-stamped SPTP when playing

Art Unit: 2616

back; and since each single program transport stream 'SPTS', e.g. "*chunks*", comprises a plurality of packets for video and audio channels and a PCR value associated with single program, which is provided every 100ms; therefore, the 'reference clock value' is provided only when PCR value present or "*timestamping only a lead packet in each chunk*" and is different with the 'timestamps generated for each individual transport packet' related to a single program as disclosed. Therefore, Examiner concludes that **Strasser** teaches the arguable feature.

Claims 2-6 are rejected as in Part 3 and 5 above of this Office action and by virtue of their dependence from claim 1.

7. The 35 U.S.C. 102 and 103 rejections to claims 7-10, 12-27 and 29-33 have been withdrawn in light of applicant's amendment filed on 16 July 2007.

***Allowable Subject Matter***

8. Claims 7-10, 12-27 and 29-33 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Many references in the art disclose the system and method for maintaining timing for program transport streams in recording and playing back. Most of those references are comprising storage medium, transport stream parser, timestamp module, and controller such as that found in Strasser et al. [U.S. 2003/0185238], Demas et al. [U.S. 2003/0165196]. But no prior art reference utilizes the temporal information such as chunk length in lead packet for reconstructing the transport stream.

***Conclusion***

9. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tri H. Phan, whose telephone number is (571) 272-3074. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H. Pham can be reached on (571) 272-3179.

**Any response to this action should be mailed to:**

**Commissioner of Patents and Trademarks**

Washington, D.C. 20231

**or faxed to:**

**(571) 273-8300**

Art Unit: 2616

Hand-delivered responses should be brought to Randolph Building, 401 Dulany Street, Alexandria, VA 22314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office, whose telephone number is (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Tri H. Phan/  
October 5, 2007

  
CHI PHAM  
SUPERVISORY PATENT EXAMINER

10/11/07